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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,877	12/11/2000	Wesa Riihinen	2380-202	2173

7590 01/30/2004

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EXAMINER

LY, NGHI H

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/732,877

Applicant(s)

RIIHINEN ET AL.

Examiner

Nghi H. Ly

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,8,9,14-17 and 22 is/are rejected.
- 7) ☒ Claim(s) 2,3,6,7,10-13 and 18-21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6. 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 4, 5, 9 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Rinne (EP 0 898 438 A2).

Regarding claim 1, 9 and 15, the applicant's admitted prior art teaches a telecommunications system having a radio access network (see Related Art and Other Considerations, page 1, lines 13-18) comprising: plural control nodes (see Related Art and Other Considerations, page 3, lines 4-6), inter-control node links for connecting the plural control nodes; a handover selection unit which makes a selection regarding which

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of plural connections handled by the radio access network (see Related Art and Other Considerations, page 3, lines 4-19) should have control thereof moved from a first control node to another of the plural control nodes to alleviate congestion on an overloaded one of the inter-control node links (see Related Art and Other Considerations, page 5, lines 1-11).

The applicant's admitted prior art does not specifically disclose the selection including a determination of a cost for each of the connections carried by the overloaded link.

Rinne teaches disclose the selection including a determination of a cost for each of the connections carried by the overloaded link (see column 14, lines 40-54).

Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention was made to provide the teaching of Rinne into the system of the applicant's admitted prior art in order reduce the load of the core network (see Rinne, first page, second column).

Regarding claims 4 and 16, the combination of the applicant's admitted prior art and Rinne further teaches the handover selection unit is situated at one of the plural control nodes (see Rinne, fig.7, mobile unit TE and RNC-link).

Regarding claims 5 and 17, the combination of the applicant's admitted prior art and Rinne further teaches the handover selection unit is situated at core network node (see Rinne, column 11, lines 2-14).

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4. Claims 8, 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Rinne (EP 0 898 438 A2) and further in view of Daraiseh et al (US 6,370,127).

Regarding claims 8, 14 and 22, the combination of the applicant's admitted prior art and Rinne teaches the system of claim 1. The combination of the applicant's admitted prior art and Rinne does not specifically disclose the handover selection unit makes the selection when an attempt is made to add a new connection or new leg of a connection to the radio access network, and wherein when hand over of control of the candidate connection to the target control node is unacceptable to the network, the handover selection unit decreases a number of the inter-control node links which can be utilized by the new connection or new leg of the connection before reattempting its selection.

Daraiseh teaches the handover selection unit makes the selection when an attempt is made to add a new connection or new leg of a connection to the radio access network, and wherein when hand over of control of the candidate connection to the target control node is unacceptable to the network, the handover selection unit decreases a number of the inter-control node links which can be utilized by the new connection or new leg of the connection before reattempting its selection (see column 6, lines 22-31).

Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention was made to provide the teaching of Daraiseh into the system of

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the applicant's admitted prior art and Rinne in order to eliminate the limiting effect of backhaul delay (see Daraiseh, see column 6, lines 22-31).

Allowable Subject Matter

5. Claims 2, 3, 6, 7, 10-13 and 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 2, 10 and 18, the combination of the applicant's admitted prior art and Rinne teaches the system of claim 1. The combination of the applicant's admitted prior art and Rinne fails to teach the cost for each of the connections carried by the overloaded link depends on (1) a number of inter-control links involved in the connection, and (2) an inter-control link bandwidth required by the connection.

Regarding claims 3, 11 and 19. The combination of the applicant's admitted prior art and Rinne teaches the system of claim 1. The combination of the applicant's admitted prior art and Rinne fails to teach the cost for each of the connections carried by the overloaded link is a product of a number of inter-control links involved in the connection and an inter-control link bandwidth required by the connection.

Regarding claims 6, 12 and 20, the combination of the applicant's admitted prior art and Rinne teaches the system of claim 1. The combination of the applicant's admitted prior art and Rinne fails to teach the selection includes a determination of a most costly one of the connections carried by the overloaded link, and wherein the most

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costly one of the connections carried by the overloaded link becomes a candidate connection for handover.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Longoni (US 6,631,125) teaches channel setup in wideband, code division multiple access systems.
- b. Laatu (US 6,212,380) teaches method and arrangement for a handover between base station controllers.
- c. Toskala (US 6,650,905) teaches universal mobile telecommunication system (UMTS) terrestrial radio access (UTRA) frequency division duplex (FDD) downlink shared channel (DSCH) power control in soft handover.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (703) 605-5164. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Nghi H. Ly

NHL

01/20/04

Marsha D. Banks-Harold
MARSHA D. BANKS-HAROLD
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